

Notice of Allowability

Application No.

10/823,362

Examiner

RAMTIN KANGARLOO

Applicant(s)

YOUNGBLOOD ET AL.

Art Unit

2619

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed 12/12/2007.
2. ☒ The allowed claim(s) is/are 1 and 3-20 (renumbered as 1- 19, respectively).
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.



CHIRAG G. SHAH
PRIMARY PATENT EXAMINER

Attachment(s)

- | | |
|--|--|
| <ol style="list-style-type: none">1. <input type="checkbox"/> Notice of References Cited (PTO-892)2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | <ol style="list-style-type: none">5. <input type="checkbox"/> Notice of Informal Patent Application6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____.7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance9. <input type="checkbox"/> Other _____. |
|--|--|

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Gary Stanford (Reg. No. 35,689) on 02/07/2008.

Claim 1, line 8, "and" has been deleted. Claim1, line 11, after ";" -- and -- had to be added.

Claim 10, line 10, "and" has been deleted. Claim10, line 13, after ";" -- and-- had to be added.

16. (Currently Amended) A method of routing a plurality of analog signals, comprising:
distributing a plurality of first analog signals among a plurality of multiplexers;
selecting a configuration for the plurality of multiplexers;
addressing the plurality of multiplexers according to the selected configuration; ~~and~~
coupling selected ones of a plurality of multiplexed signals from the plurality of multiplexers according to the selected configuration to a plurality of second analog data signals; and
wherein said plurality of multiplexers comprises M multiplexers, each receiving
N address signals and coupling a selected one of 2N first data signals to a
corresponding one of M multiplexed signals in which N, M, Y = LOG2M
and N are positive integers, and wherein said configuration logic controls

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said switch matrix to configure said M multiplexers as a number $M/(2Y-X)$ of $(M/2X)(2N)$: 1 multiplexer(s) in which X is a selected integer between 0 and Y.

Allowable Subject Matter

2. Claims 1, 3-20 are allowed.

3. The following is a statement of reasons for the indication of allowable subject matter: Su (US Patent No 5212808) teaches the digitally configurable multiplexer/de-multiplexer including switch matrix and configuration logic.

However prior art of record fails to teach plurality of multiplexers comprises M multiplexers, each receiving N address N signals and coupling a selected one of 2 first data signals to a corresponding one of M multiplexed signals in which N, $|Y|$, $Y = \text{LOG}_2 M$ and N are positive integers, and wherein said configuration logic controls said switch matrix to configure said M multiplexers as a number $M/(2Y-x)$ of $(M/2X)(2N)$: 1 multiplexer(s) in which X is a selected integer between 0 and Y. in combination with other limitation disclosed in the respective claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to RAMTIN KANGARLOO whose telephone number is (571)270-3452. The examiner can normally be reached on Mon to Fri 8 AM to 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on (571) 272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ramtin Kangarloo
Examiner Art Unit 2619
February 12, 2008



CHIRAG G. SHAH
PRIMARY PATENT EXAMINER